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FEB 14 1991 Sheet 1 of 10

FORM PTO-1009 REV. 7-80	U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. CRP-00120V	SERIAL NO. 21,988
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)		GROUP 150	
		APPLICANT Uppermann et al.	
		FILED DATE December 4, 1990	GROUP 1503

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILED DATE IF APPROPRIATE
NMN	AA	4 2 9 4 7 5 3	10/81	Urist	260 530	112 375	
NMN	AB	4 3 9 4 3 7 0	07/83	Jefferies	424	15	
NMN	AC	4 4 3 4 0 9 4	02/84	Seyedin et al.	530 260	416 112	
NMN	AD	4 4 5 5 2 5 6	06/84	Urist	530 260	370 112	
NMN	AE	4 5 6 3 3 5 0	01/86	Nathan et al.	424	95	
NMN	AF	4 5 6 3 4 8 9	10/86	Urist	524	21	
NMN	AG	4 8 7 7 8 6 4	10/89	Wang et al.	530	324	
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FOREIGN PATENT DOCUMENTS

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NMN	AM	8 6 0 0 5 2 6	1/86	PCT (WO)				
NMN	AN	8 8 0 0 2 0 5	1/88	PCT (WO)				
NMN	AO	8 9 0 9 6 0 5	10/89	PCT (US)				
NMN	AP	8 9 1 0 4 0 9	11/89	PCT (US)				

OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)

NMN	AR	Canalis et al. (1980) Science 210:1021-1023	14
NMN	AS	Glowacki et al. (1981) Lancet 1:959-963	14
NMN	AT	Reddi (1981) Collage Rel. Res. 1:209-226	14

EXAMINER Nathan M. Nutter	DATE CONSIDERED 10-91
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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402

FORM 1
REV. 7-80U. S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
CRP-0012DVSHEET NO. 2 of 11
SERIAL NO.
621,988

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LIST OF REFERENCES CITED BY APPLICANT
(Use several sheets if necessary)APPLICANT
Uppermann et al.

FEB 14 1991

FILING DATE
December 4, 1990GROUP
152/508 GROUP 150

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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NW	AO	0 1 6 9 0 1 6	1/86	EPD				
NW	AP	0 1 8 2 4 8 3	5/86	EPD				

OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)

NW	AR	Sampath et al. (1981) Proc. Natl. Acad. Sci. USA 78:7599-7603
NW	AS	Farley et al. (1982) Biochem. 21:3508-3513
NW	AT	Maugh (1982) Science 217:819

EXAMINER

Nathan M. Hunter

DATE CONSIDERED

10-91

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463

FORM PTO. 1449
REV. 6-87U. S. DEPARTMENT OF COMMERCE
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ATTY. DOCKET NO.

CRP-0012DV

Sheet 2 of 10
SERIAL NO.

621,988

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LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT

Oppermann et al.

FEB 14 1991

FILING DATE

December 4, 1990

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U. S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)

NW	AR	Sampath et al. (1983) Proc. Natl. Acad. Sci. USA 80:6591-6595
NW	AS	Seyedin et al. (1983) J. Cell Biol. 97:1950-1953
NW	AT	Urist et al. (1983) Proc. Soc. Exp. Bio. Med. 173:194-199

EXAMINER

Nathan M. Unth

DATE CONSIDERED

10-91

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Sheet 4 of 10

FORM 609 REV. 7-89		U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. CRP-00120V		SERIAL NO. 621,988		RECEIVED	
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Uppermann et al.		FILING DATE December 4, 1990		GROUP 152/150 3 FEB 14 1991 GROUP 150	
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NW	AR	Simpson (1984) Trends Biochem. Sci. 9:527-530 14							
NW	AS	Urist et al. (1984) Clin. Orth. Rel. Res. 187:277-280 14							
NW	AT	Urist et al. (1984) Proc. Natl. Acad. Sci. USA 81:371-375 14							
EXAMINER Walter M. Walter				DATE CONSIDERED 10-91					
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.									

403



Sheet 5 of 10

FORM PTO. 1200 REV. 7-80		U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. CRP-00120V		SERIAL NO. 621,988	
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Uppermann et al.		RECEIVED FEB 14 1991 152/1503	
				FILING DATE December 4, 1990			
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OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)							
NW	AR	Centrella (1985) Proc. Natl. Acad. Sci. USA 82:7335-7339 14					
NW	AS	Klausner (1985) Biotechnology 3:567-568 14					
NW	AT	Olson et al. (1985) Analyt. Biochem. 146:232-237 14					
EXAMINER Nathan M. Nutter				DATE CONSIDERED 10-91			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

406

FORM 1-79 448
REV. 7-8U. S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

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CRP-00120V

Sheet 6 of 10
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LIST OF REFERENCES CITED BY APPLICANT

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APPLICANT

Oppermann et al.

FILING DATE

December 4, 1990

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U. S. PATENT DOCUMENTS

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OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)

nmw	AR	Reddi (1985) Journal of Biomedical Materials Research 19:233-239
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nmw	AS	Sampath and Reddi (1985) Extracellular Matrix: Structure and Function (A.H. Reddi, Ed.) Allen R. Liss, Publ., NY pp. 412-428
nmw	AT	Seyedin et al. (1985) Proc. Natl. Acad. Sci. USA 82:2267-2271
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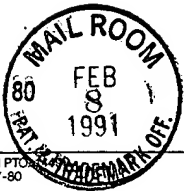
Kathleen M. Katter

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10-91

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407



Sheet 7 of 10

FORM PTO
REV. 7-80U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
CRF-0012DVSERIAL NO.
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LIST OF REFERENCES CITED BY APPLICANT
(Use several sheets if necessary)APPLICANT
Oppermann et al.

FEB 14 1991

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U.S. PATENT DOCUMENTS

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OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)

NMN	AR	Colowick et al. (1987) Methods in Enzymology 146:294-312
NMN	AS	Padgett et al. Nature 325:81-84 (1987)
NMN	AT	Sampath et al. (1987) Proc. Natl. Acad. Sci. USA 84:7109-7113

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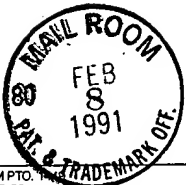
Matthew M. Wutt

DATE CONSIDERED

10-71

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408



Sheet 5 of 10

FORM PTO.
REV. 7-80U. S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

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Uppermann et al.

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FILING DATE

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OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)

NW	AR	Weeks et al. (1987) Cell 51:861-867
NW	AS	LeGendre et al. (1988) Biotechniques 6:154-159
NW	AT	Wang et al. (1988) Calcified Tissue Int. (Suppl) Ab No. 146, pp. A37

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Guthrie M. Guthrie

DATE CONSIDERED

10-91

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489



FORM PTO. 1449
REV. 7-80

U. S. DEPARTMENT OF COMMERCE
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SHEET NO. 2 of 10
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LIST OF REFERENCES CITED BY APPLICANT
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APPLICANT
Oppermann et al.

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U. S. PATENT DOCUMENTS

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OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)

NW	AR	Wang et al. II (1988) Proc. Natl. Acad. Sci. USA 85:9484-9488
NW	AS	Wozney et al (1988) Calcified Tissue Int. (Suppl) Ab No. 146, pp. A37
NW	AT	Wozney et al. II (1988) Science 242:1528-153

EXAMINER

Walter M. Watter

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410



Sheet 10 of 10

FORM PTO. 1009 REV. 7-80	U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. CRP-0012DV	SERIAL NO. 621,988
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT Uppermann et al.	GROUP 152 1503
		FILING DATE December 4, 1990	FEB 14 1991

U.S. PATENT DOCUMENTS

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OTHERS (Including Author, Title, Date, Pertinent Pages, Etc.)

NW	AR	Lyons et al. (1989) Proc. Natl. Acad. Sci. USA 86:4554-4558
NW	AS	Wang et al. (1990) PNAS 87:2220-2224
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411